

# **MXview Lite v2 User's Manual**

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**First Edition, March 2009**

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# MXview Lite v2 User's Manual

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Moxa's MXview Lite network management software is designed for configuring, monitoring, and troubleshooting Moxa Ethernet switches connected to industrial Ethernet networks. MXview Lite provides an integrated management platform that can detect Moxa Ethernet switches and SNMP-enabled devices installed on multiple subnets. All selected network components can be managed by web browser from both local and remote sites—anytime and anywhere.

This chapter covers the following topics:

- ❑ **About this document**

- ❑ **Key Features**

- Web-based Operation
- Visualizing Devices and User Defined Topology
- Alarm Management
- Traffic Monitoring
- Configuration and Firmware Management of Moxa Ethernet Switches

## About this document

This document provides MXview Lite v2 installation and user interface instructions.

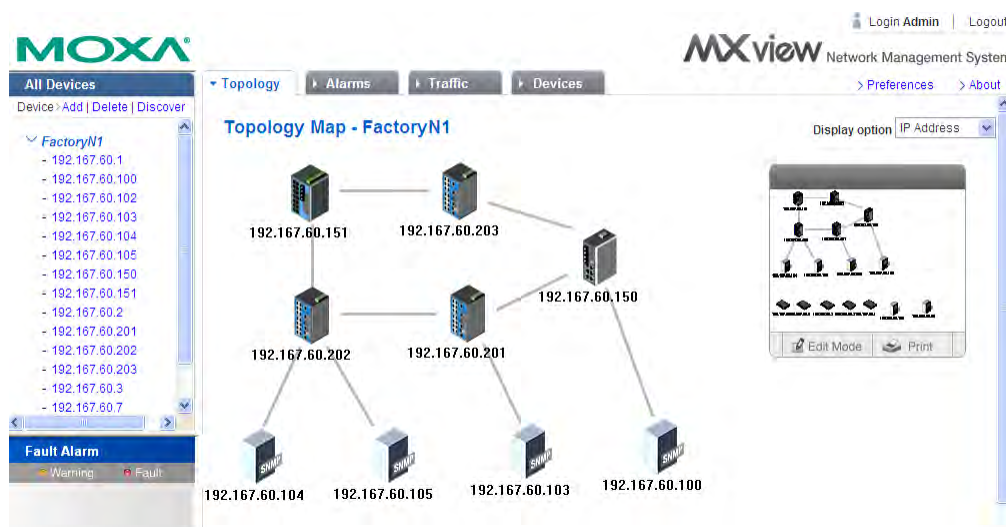
## Key Features

### Web-based Operation

You need to install MXview Lite server software on a Windows computer connected to the same network the Moxa Ethernet switches to be managed are on. After proper installation, you will be able to manage your industrial Ethernet network on any Windows computer running Internet Explorer without having to install additional software. Up to four users are allowed to access the MXview Lite system simultaneously.

### Visualizing Devices and User Defined Topology

MXview Lite provides intuitive device icons and a user editable topology. It is extremely helpful to be able to get a quick overview of your devices from the web browser.



## Alarm Management

MXview will log the alarms based on preset conditions. The status warning of the “Fault Alarm” info box (at the bottom left corner) and topology map is very useful to track problems in detail.

Key features of the alarm function are:

- Notification based on preset conditions, such as device inaccessible via ICMP and SNMP, link down, bandwidth utilization rate, and packet error rate.
- Notification via e-mail
- Event thresholds as defined by the administrator
- Alarm history
- Alarm search by date, network range, and device
- Two color-coded levels of alarm severity
- Can export to CSV (Comma-Separated Values) format and is compatible with Microsoft Excel and Microsoft Access.

### Alarm History

						Export	Delete
Network	Series	IP	Port	Start Date	End Date		
All Devices ▾	-- ▾	-- ▾	-- ▾	2009-04-13	2009-04-13		
						Reset	Submit
						Refresh	
ID	Alarm Source	Alarm Type	Severity	Description	Issue Time	Close Time	
16	192.168.27.2 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:55	
17	192.168.27.3 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:55	
18	192.168.27.4 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:55	
15	192.168.27.1 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:55	
11	192.168.26.7 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:54	
12	192.168.26.8 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:54	
13	192.168.26.9 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:54	
14	192.168.26.10 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:54	
10	192.168.26.6 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:54	
6	192.168.22.3 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:16:45	2009-04-13 14:16:55	

## Traffic Monitoring

You may log the network traffic for a specific port or interface on the network device.



## Configuration and Firmware Management of Moxa Ethernet Switches

MXview Lite provides unique support to fit your needs while managing mission-critical industrial Ethernet networks. The following features will help you manage Moxa Ethernet Switches easily:

- Direct link to Moxa's managed Ethernet switch's web console
- Import configuration files from Moxa's managed Ethernet switches
- Update configuration files to an Ethernet switches individually
- Update firmware to Ethernet switches individually (or in a group).
- Firmware update records.

	Model	IP	MAC Address	Firmware Rev.	Last Upgrade
-	SNMP-Device	192.167.60.100	00:00:E8:49:25:61	V2.1.8	N/A
<input type="checkbox"/>	PT-7828	192.167.60.1	00:90:E8:17:54:74	V1.1	N/A
<input type="checkbox"/>	PT-7828	192.167.60.2	00:90:E8:17:54:75	V1.1	N/A
<input type="checkbox"/>	PT-7828	192.167.60.3	00:90:E8:17:54:6F	V1.1	N/A
<input type="checkbox"/>	PT-7828	192.167.60.7	00:90:E8:17:54:78	V1.1	N/A
<input type="checkbox"/>	PT-7828	192.167.60.8	00:90:E8:17:54:67	V1.1	N/A
-	MOXA-Device	192.167.60.102	00:90:E8:50:08:03	V2.1.8	N/A
-	MOXA-Device	192.167.60.103	00:90:E8:26:10:17	V2.1.8	N/A
-	MOXA-Device	192.167.60.104	Unknown	V2.1.8	N/A
-	MOXA-Device	192.167.60.105	Unknown	V2.1.8	N/A
<input type="checkbox"/>	EDS-518A-MM-SC	192.167.60.201	00:90:E8:0E:DE:F7	V2.5	N/A
<input type="checkbox"/>	EDS-518A	192.167.60.202	00:90:E8:03:03:03	V2.5	N/A
<input type="checkbox"/>	EDS-518A-T	192.167.60.203	00:90:E8:07:09:0B	V2.5	N/A
<input type="checkbox"/>	EDS-518A-MM-SC	192.167.60.151	00:90:E8:15:7E:BE	V2.3	N/A

# 2

## System Requirements and Supported Devices

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MXview Lite's system requirement is as follows:

Hardware Requirements	
CPU	Intel Core 2 Duo CPU 2.4 GHz or above
RAM	1 G or above
Hard disk space	1 G or above
Software Requirements	
Operating system	Windows XP Professional/2000/2003
Browser	IE 6.0 Service Pack 1 or higher version
Language Support	
User interface User manual	English

Moxa's managed Ethernet switches have the benefit of extensive functions such as network status, traffic log, and configuration /firmware file management. The following managed Ethernet switches support the previously mention functions:

- EDS-400A series: EDS-405A, EDS-408A.
- EDS-500A series: EDS-505A, EDS-508A, EDS-510A, EDS-516A, EDS-518A.
- EDS-726 series modular industrial managed Ethernet switches.
- EDS-728 series modular industrial managed Ethernet switches.
- EDS-828 series modular industrial managed Ethernet switches.
- PT-7710/7728/7828 IEC-61850 compliant modular managed Ethernet switches.

For other SNMP-enabled devices, MXview Lite supports standard network management tools such as link up, link down, and network traffic monitoring, as defined by MIBII.

# 3

## Installation and Startup

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The installation procedure is simple. MXview Lite is packaged as one installation file named **MXview\_Lite.exe**. Installation starts by executing this file.

(Note: You may need administrator privileges for the installation of MXview Lite.)

This chapter covers the following topics:

- ❑ **Installation Procedure**
- ❑ **MXview Lite Startup**

## Installation Procedure

1. If MXview Lite V1 was previously installed, we recommend un-installing MXview Lite V1 prior to installing MXview Lite v2. It is not a must to un-install V1, as the performance of v2 will not be affected. However, you will find two entries in Start Menu instead of one.
2. Start the MXview Lite setup program and follow the instructions to setup up your MXview Lite.
3. The next dialog will let you choose the directory in which to install MXview Lite.
4. MXview Lite will create a program group on the Start Menu.
5. The next step allows users to create a desktop icon.
6. The next step is a summary of the installation settings. To modify the settings that you had set earlier, click "**Back**" to do so.
7. Click on "**Install**" to start the setup process.
8. The installation process lasts a few minutes. Once the process is finished, the following dialog will appear. Click on "**Finish**" to complete the installation process.

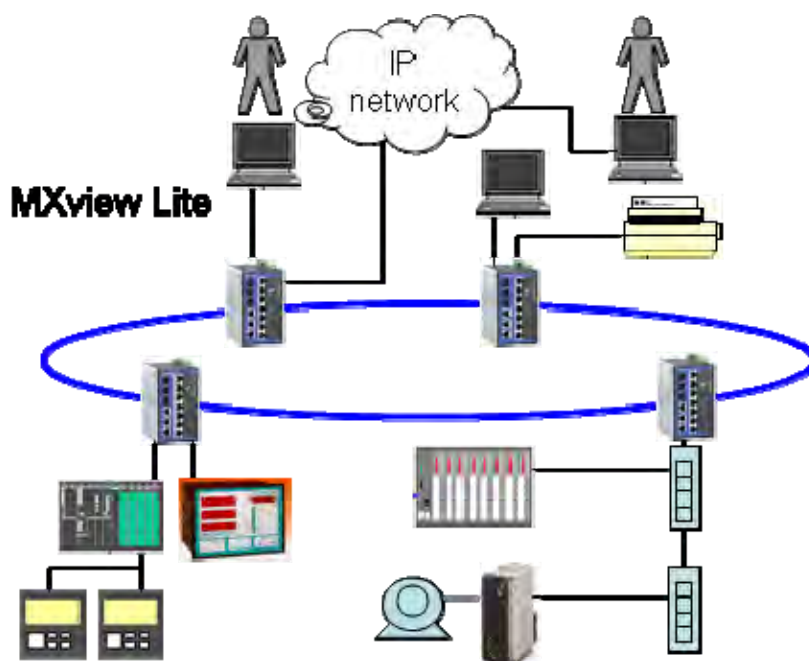
## MXview Lite Startup

MXview Lite can be started from the local computer by double-clicking on the desktop icon. Before using MXview Lite for the first time, you will need to enter the MXview Lite to set initial configurations, especially to define the network components you would like to monitor. After that, MXview will work in background mode to scan the specified network components.



If you choose "**No**," you may enter the web console page later by clicking on the "MXview" icon on the system status bar.

MXview Lite is implemented as a web-based service to realize local and remote management through a single portal. The following figure illustrates the operation model



The MXview Lite system runs in the background on a Windows PC. MXview Lite communicates with network devices using SNMP plus a Moxa proprietary protocol that periodically polls specific MIB data and stores the data in a local database.

MXview provides a uniform web interface to enable network operators to access and operate their network through the Internet or Intranet via a web browser.

## Login

Once MXview Lite is properly installed, users can enter MXview Lite by web browser straight away. There are several ways to launch web interfaces.

- From a local computer:

Start by double clicking the “MXview Lite” icon on the system task bar. Press “Open MXview” and the web browser will activate automatically.

You may also enter the IP address of the computer in the browser to access MXview.

The next step is to enter the user name and password. The user name is predefined as “Admin.” For first time installations, a password is not required.

- From a remote computer:

You may enter the IP address or domain name of the computer running MXview Lite in the browser.

The next step is to enter the user name and password. The user name is predefined as “Admin.” For first time installations, a password is not required.



## Change Listening Port

The default entry TCP port is 80. If this conflicts with other services in the same computer, you may change the TCP port number to any available port of your choice. The operation is as follows.

1. Double click the **MXview Lite** icon on the system task bar.

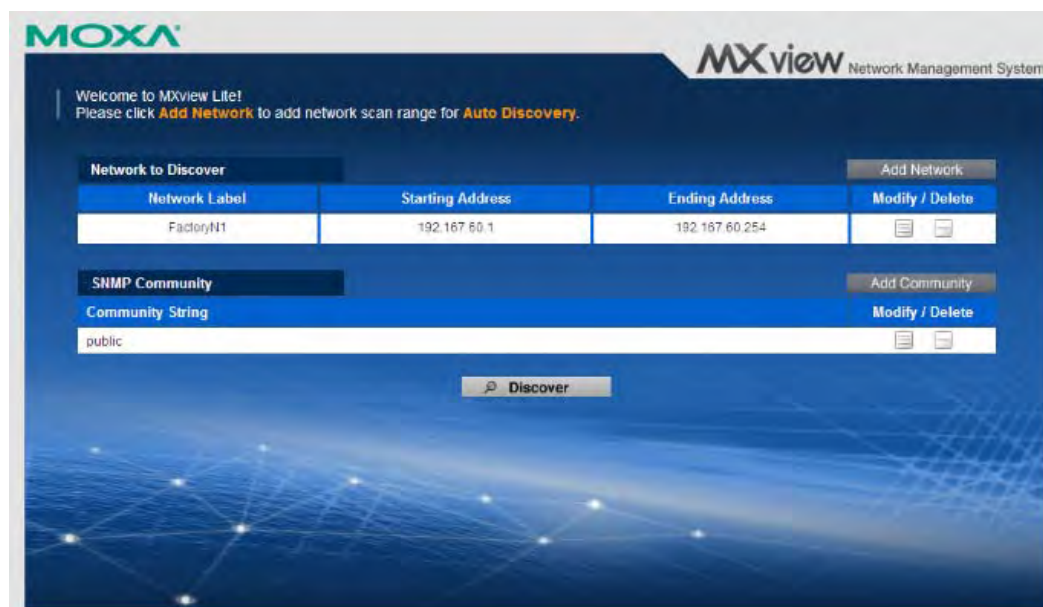


2. The screen below will appear, press the “Stop” button.
3. Enter the Listening port of your choice (please make sure the TCP port is available).
4. Press the “Open MXview” button to start the service again.



## First Time Launch

When you enter MXview Lite for the first time, the “Auto Discovery” wizard will appear and you can specify the scan range of your network. The wizard will scan the installed network devices based on your settings.



By default, MXview will select the network interface on the system as its default discovery domain. This process can last a few minutes depending on the range of the network.

# 5

## Device Discovery

At this point, you will be able to see the installed devices on the device list. You may launch “Auto Discovery” again to update the installed network components. You may also manually add or delete network components on the device list.

Please note that MXview Lite v2 can monitor up to 256 network nodes, including Moxa’s Ethernet switches and standard SNMP devices.

16 devices found <span>Cancel</span> <span>Submit</span>				
Click Device Name to set up advanced monitoring parameters.				
Monitor	Device Name	Model	IP Address	MAC Address
<input checked="" type="checkbox"/>	Managed Redundant Switch 00000	EDS-518A-T	192.167.60.203	00:90:E8:07:09:0B
<input checked="" type="checkbox"/>	Managed Redundant Switch 00000	EDS-518A	192.167.60.202	00:90:E8:03:03:03
<input checked="" type="checkbox"/>	Managed Redundant Switch 00099	EDS-518A-MM-SC	192.167.60.201	00:90:E8:0E:DE:F7
<input checked="" type="checkbox"/>	Managed Redundant Switch 07022	EDS-518A-MM-SC	192.167.60.151	00:90:E8:15:7E:BE
<input checked="" type="checkbox"/>	Managed Redundant Switch 00000	EDS-408A-3M-SC	192.167.60.150	04:04:04:04:04:04
<input checked="" type="checkbox"/>	AWK-4121_0000	MOXA-Device	192.167.60.105	
<input checked="" type="checkbox"/>	AWK-3121_0001	MOXA-Device	192.167.60.104	
<input checked="" type="checkbox"/>	NP6650-8_50082	MOXA-Device	192.167.60.102	00:90:E8:50:08:03
<input checked="" type="checkbox"/>	CN2610-16_26108	MOXA-Device	192.167.60.103	00:90:E8:26:10:17
<input checked="" type="checkbox"/>	CBD	SNMP-Device	192.167.60.100	00:00:E8:49:25:61
<input checked="" type="checkbox"/>	JEMIN_SU	SNMP-Device	192.167.60.99	00:60:6E:00:F1:CD
<input checked="" type="checkbox"/>	Managed Redundant Switch 00464	PT-7828	192.167.60.1	00:90:E8:17:54:74
<input checked="" type="checkbox"/>	Managed Redundant Switch 00464	PT-7828	192.167.60.7	00:90:E8:17:54:78
<input checked="" type="checkbox"/>	Managed Redundant Switch 00464	PT-7828	192.167.60.3	00:90:E8:17:54:6F
<input checked="" type="checkbox"/>	Managed Redundant Switch 00464	PT-7828	192.167.60.2	00:90:E8:17:54:75
<input checked="" type="checkbox"/>	Managed Redundant Switch 00464	PT-7828	192.167.60.8	00:90:E8:17:54:67

## Auto Discovery

Auto Discovery is applied to detect devices within pre-defined network ranges. To be detectable, the devices should be accessible via ICMP-Ping and SNMP. Click on the “Discover” in the Auto Discovery to perform device detection.

### Auto Discovery



#### Network to Discover

[Add Network](#)

<input checked="" type="checkbox"/>	Network Label	Starting Address	Ending Address	Modify/Delete
<input checked="" type="checkbox"/>	Network	10.10.2.1	10.10.2.10	 

#### SNMP Community

[Add Community](#)

SNMP Community String	Modify/Delete
public	 

[Discover](#)

Network Label

Starting Address

Ending Address

Cancel

OK

### Network to Discover

It allows you to define the network group used to scan for installed network devices. By clicking “Add Network,” you may define the network group name and IP range for device discovery.

### SNMP Community

A valid read-only or read-write community string for SNMP protocol should be provided. The default community name is “public.”

## Add Device

Devices can be added manually, one at a time, into the device list. The IP address and SNMP community strings are required and you can add up to 64 characters. Click “Search” for MXview Lite to start detecting the specified device(s).

When a device is found, please select the network group that it belongs to. If you would like to create another network group, please click “Discover” and go to “Auto Discovery” to define a new network group.

Device Name	Model	IP Address	MAC Address	Network
Managed Redundant Switch 01802	EDS-405A-MM-SG	192.168.1.61	00:90:E8:33:0A:82	Network-1

## Deleting a Device

You may remove one or more listed devices in the device list to reduce unnecessary workload. If you would like to delete a network group, you should delete all its network devices first.

	Model	IP	MAC Address
<input type="checkbox"/>	SNMP-Device	192.167.60.100	00:00:E8:49:25:61
<input type="checkbox"/>	PT-7828	192.167.60.1	00:90:E8:17:54:74
<input type="checkbox"/>	PT-7828	192.167.60.2	00:90:E8:17:54:75

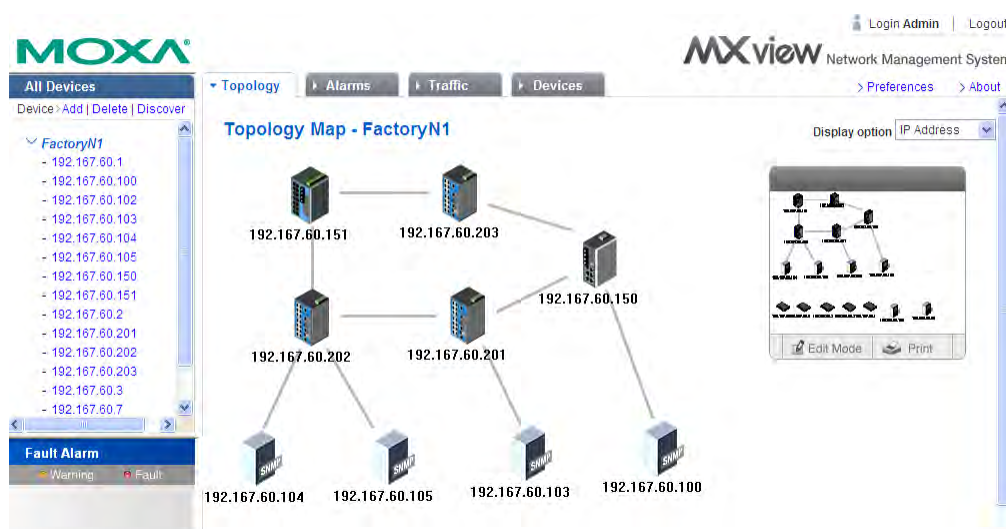
## Initial Monitoring Behavior

For newly added or detected devices, all the link up ports are automatically set as fully monitored ports. For ports with link down status, you may change the monitoring settings by selecting the devices tab, and manually changing the settings.

## Overview of MXview Lite Console

MXview Lite console can be separated into several areas as follows.

- Device List area
- Fault Alarm area
- Topology Map area
- User Status
- Preferences (your system preferences)



## Device List

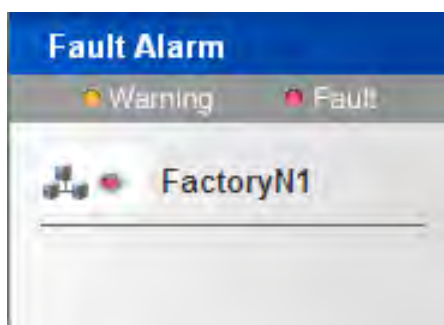


All the monitored network devices will be arranged and displayed on the device list according to their network groups. To view the IP address of the devices belonging to the network group, simply click on the network group name.

## Fault Alarm

This area will be empty unless there is a problem with the monitored device(s). If there is a situation with any of the monitored devices, that network group will be listed in this area and a color-coded signal will light up to indicated the level of severity.

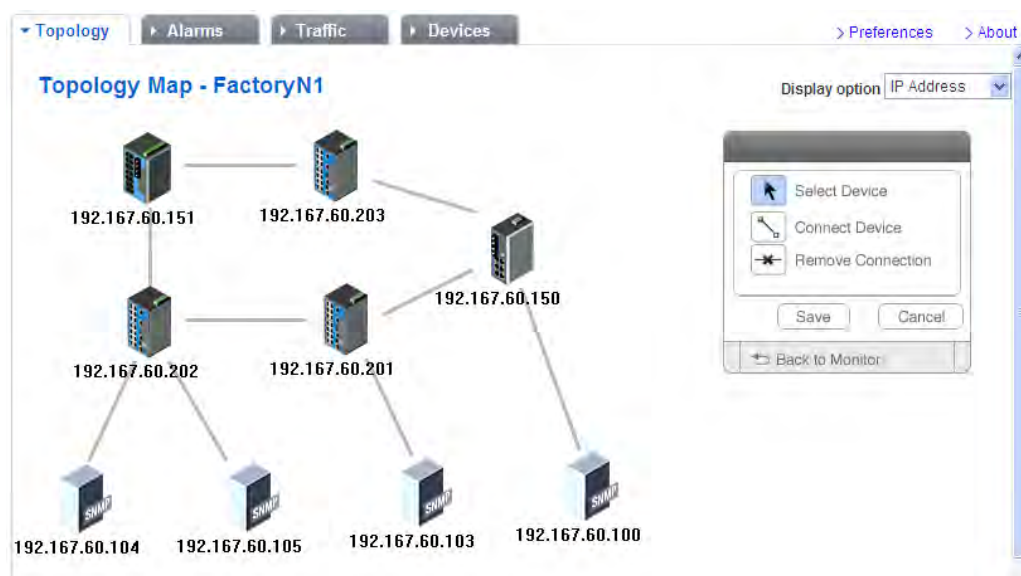
By clicking on the network group(s) displayed here, you will be directed to the “Topology” page. The “Topology” makes it easy to locate the device(s) with alarm issues. Click on the device, and then click on “Alarms,” to view related alarms in the “Alarms” page.



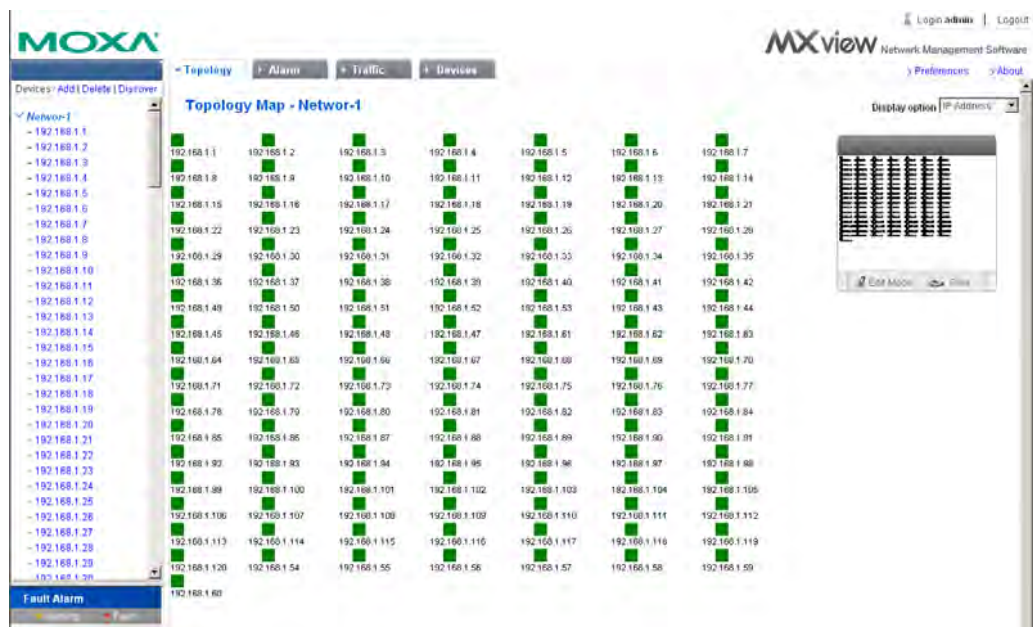
## Topology Map

This area displays the icons for monitored devices. If there are too many monitored devices to fit on a single web page, the mini map at the right will show all of the devices. By clicking on the pull down button of the “Display option,” you may choose to view the monitored switches by, IP Address, Model Name, MAC Address, or location.

If you need to rearrange the device icons, you can do so by clicking the “Edit Mode” on the mini map. In addition, you may create virtual connections between devices to indicate logical connections between network devices. Remember to click on “Save” when you are finished, and then click on “Back to Monitor.”



Device icons can be displayed as small or large. For optimal performance, the maximum number of devices displayed on the topology map is 120 for small icons and 60 for large icons. Please refer to Chapter 10, “Default Monitoring Settings,” for more details.



## User status

The user status indicates the name of the current user. If you are exiting the system, it is highly recommended that you click on “Logout” before exiting.

## Preferences

You can make system level configurations such as password change, email notification for when an alarm goes off, auto-refresh timer for automatic web page refresh, and default monitoring settings by clicking on “Preferences.” Please refer to Chapter 10 for more information.

When one of the following situations occurs, MXview Lite will log an alarm for the selected devices or ports/interfaces.

- Inaccessible via ICMP (ping)
- Inaccessible via SNMP
- Port link down
- Port utilization rate higher than the specified threshold
- Port pack error rate higher than the specified threshold
- Port collision rate high than the specified threshold

There are two ways to checking alarm messages. One way is through the device list to check for the alarms of specific monitored devices. Another way is to click on “Alarms” tab and check all alarms.

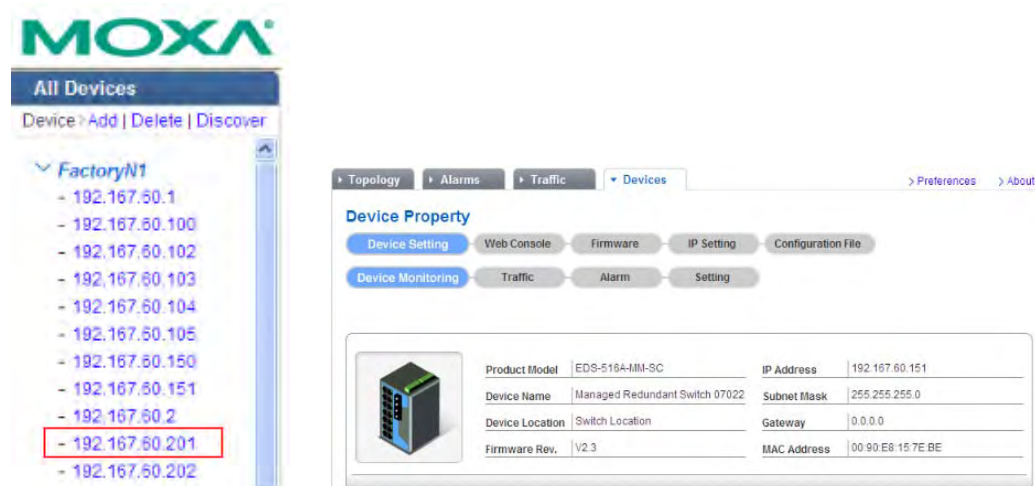
**Alarm History** Export Delete

Network	Series	IP	Port	Start Date	End Date
All Devices				2009-04-13	2009-04-13
<span>Reset</span> <span>Submit</span> <span>Refresh</span>					

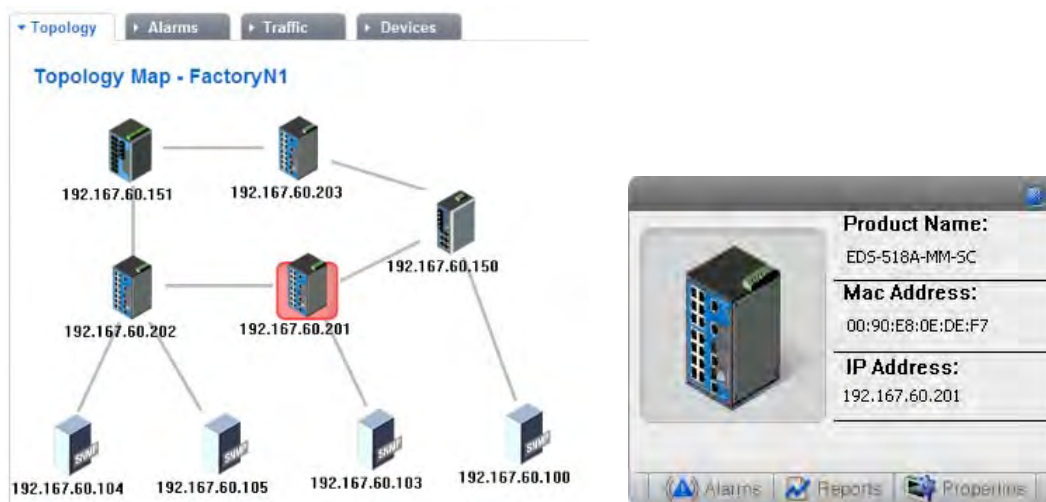
ID	Alarm Source	Alarm Type	Severity	Description	Issue Time	Close Time
16	192.168.27.2 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:55
17	192.168.27.3 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:55
18	192.168.27.4 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:55
15	192.168.27.1 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:55
11	192.168.26.7 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:54
12	192.168.26.8 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:54
13	192.168.26.9 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:54
14	192.168.26.10 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:54
10	192.168.26.6 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:54
6	192.168.22.3 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:16:45	2009-04-13 14:16:55

## Check Alarms from Device List or Topology

Click on an IP address on the Device List to get the “Device Property” page. Click on “Alarm” and MXview Lite will display all the alarms related to the device.



You can also click on the “Topology” tab and then on the device’s icon and a device property sub screen will appear. Click on the “Alarms” button on the bottom of the sub screen and MXview Lite will display all the alarms related to the device.



## Check All Alarms

By clicking on the “Alarms” tab, you will enter the “Alarm History” page, which displays all the alarms within 24 hours. If you would like to see all the alarms that MXview Lite has stored, click on “Alarm History.”

In “Alarms History” page, you can do following:

- Search alarms by Network Group, Product Series, IP address, Interface, and Date range.
- Export all the alarms to CSV (Comma-Separated Values) format, which is compatible with Microsoft Excel and most database software.
- Clear all the alarms in the system

## Search

Choose an option from the dropdown list; you may use single condition or multiple conditions to narrow the scope of the alarm search. This feature is useful for analyzing possible fault sources.

**Alarm History** Export Delete

Network	Series	IP	Port	Start Date	End Date	
<input type="text" value="All Devices"/>	<input type="text" value="--"/>	<input type="text" value="--"/>	<input type="text" value="--"/>	<input type="text" value="2009-04-13"/>	<input type="text" value="2009-04-13"/>	
<span>Reset</span> <span>Submit</span> <span>Refresh</span>						
ID	Alarm Source	Alarm Type	Severity	Description	Issue Time	Close Time
16	192.168.27.2 - PT-7828	Device inaccessible	Fault	-	2009-04-13 14:36:45	2009-04-13 14:36:55

## Export

Click on “Export,” and the system will prompt you to confirm the file name and location you would like to use.

## Delete

Click on “Delete,” and the system will ask you to confirm the operation. If you click on “OK”, all of the stored alarm records will be deleted from MXview Lite system. Be sure you have exported all the logs, if necessary, before you decide to perform the clear function.

## Alarm Severity Level

There are two levels of alarm severity. They are:

- Fault:  
The issue is serious and immediate action(s) should be taken.
- Warning:  
There is an issue, which requires attention.

## Email notification

You may configure the system to notify up to five parties by e-mail when an alarm occurs (the level of severity for notification can be individually set for each party). Refer to page 10-2 for

more details.

# 8

## Traffic Report

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MXview Lite logs traffic reports for specified ports. There are three charts that display:

- Input/Output Traffic (Bits/Second)
- Good Packets (Packets/Second)
- Error Packets (Packets/Second)



### **Check Traffic Report for Selected Port**

Click on the “Traffic” tab, and then click on a listed device to open its traffic report chart.

### **List Traffic Report for Two Selected Ports**

By clicking on “Group Reports,” a traffic report chart will be displayed; you may select up to two interfaces.

### **Disk Size**

The traffic reports will be stored on the hard disk every 60 seconds. A maximum of 7 days of records will be kept in the system. Hard disk size usage depends on the number of ports logged. For example, an eight port Ethernet switch uses around 1.1 Mega bytes every 24 hours.

## Managing Moxa's Ethernet Switches

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MXview Lite provides special management tools to help you manage mission-critical industrial Ethernet devices. There are three major components to managing Moxa's Ethernet switches.

- Device Properties

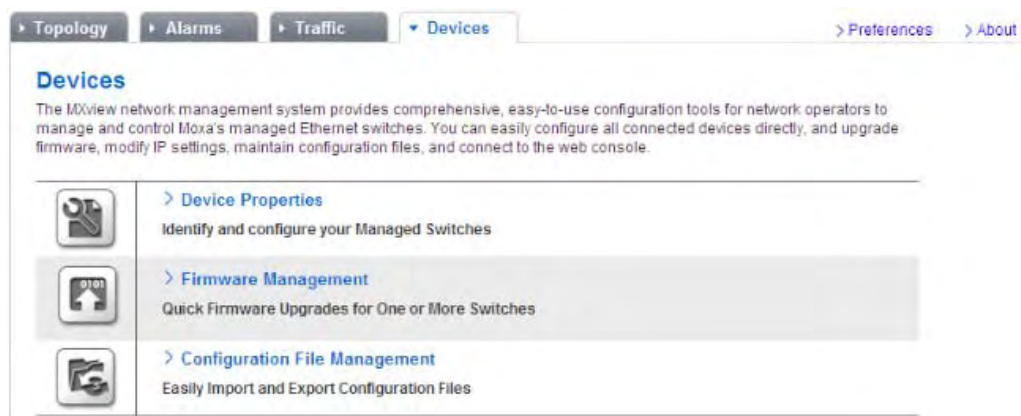
Device Configuration: link the web consoles of the switches, change IP settings, and checking firmware version and configuration files.

Device Monitoring: network traffic, alarms, and related settings.

- Load firmware to Moxa Ethernet switches.
- Configuration file upload and download for Moxa Ethernet switches.

### Devices Tab

Click on "Device" tab to get the following:



## Device Properties

Click on “Device Properties,” and a list of monitored devices including Moxa switches and SNMP devices will be displayed. Please note that SNMP devices are supported, but with limited functions for web console, network traffic, alarm, and monitoring related settings. Moxa Ethernet switches have full access to all the functions in “Device Properties.”

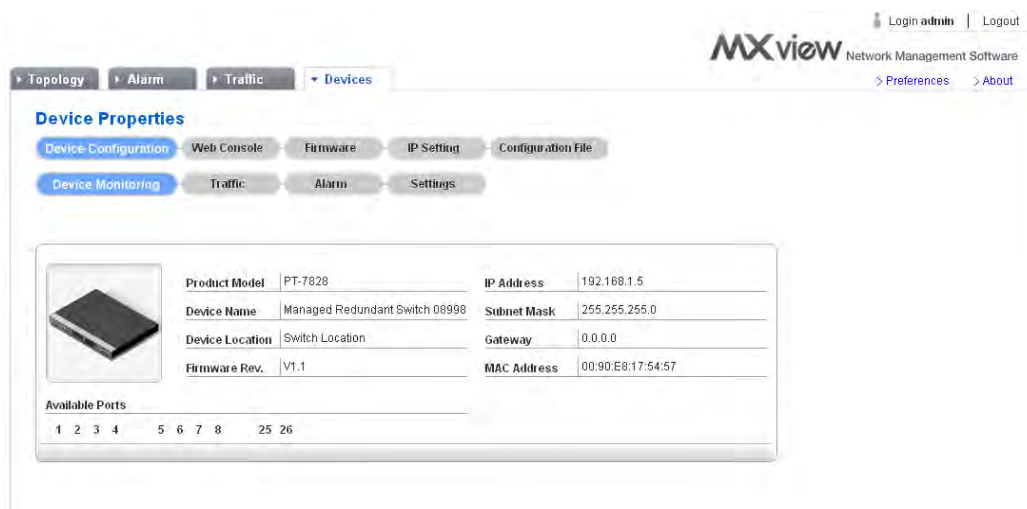


The screenshot shows the 'Device Properties' window with a table of monitored devices. The table has columns for Name, Model, IP, and MAC Address. The devices listed are:


Name	Model	IP	MAC Address
CBD	SNMP-Device	192.167.60.100	00:00:E8:49:25:61
Managed Redundant Switch 00464	PT-7828	192.167.60.1	00:90:E8:17:54:74
Managed Redundant Switch 00464	PT-7828	192.167.60.2	00:90:E8:17:54:75
Managed Redundant Switch 00464	PT-7828	192.167.60.3	00:90:E8:17:54:6F
Managed Redundant Switch 00464	PT-7828	192.167.60.7	00:90:E8:17:54:78
Managed Redundant Switch 00464	PT-7828	192.167.60.8	00:90:E8:17:54:67
NP6650-8_50082	MOXA-Device	192.167.60.102	00:90:E8:50:08:03

Select one of Moxa’s Ethernet switches and its basic information will be displayed. The two functions of “Device Properties” are:

- Device Configuration
- Device Monitoring



The screenshot shows the 'Device Properties' window with detailed information for a selected Moxa Ethernet switch. The window has tabs for 'Device Configuration' and 'Device Monitoring'. The 'Device Configuration' tab is active, showing the following information:

	Product Model	PT-7828	IP Address	192.168.1.5
	Device Name	Managed Redundant Switch 08998	Subnet Mask	255.255.255.0
	Device Location	Switch Location	Gateway	0.0.0.0
	Firmware Rev.	V1.1	MAC Address	00:90:E8:17:54:57

Below the table, there is a section for 'Available Ports' with a row of buttons numbered 1 through 26.

## Device Configuration


There are four functions in Device Configuration.

- Web Console:

Click on “Web Console” and MXview Lite will open a new browser window and automatically link to the web console of the selected device. You may, for example, configure, troubleshoot, and instantaneously perform in-depth monitoring for Moxa Ethernet switches.

- Firmware:

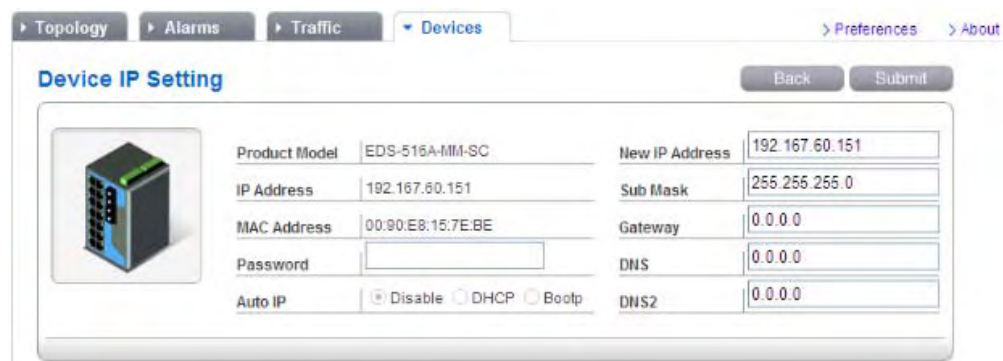
Firmware version along with basic device information will be displayed in a sub window. If you would like to upgrade the firmware for your Moxa Ethernet switch, you may click on “Upgrade” to do so.



Product Model	EDS-516A-MM-SC
IP Address	192.167.60.151
MAC Address	00:90:E8:15:7E:BE
Location	Switch Location
Firmware Rev.	V2.3

- IP Setting

You may change the IP settings using MXview Lite; this is very convenient for first time installation or maintenance.



Product Model	EDS-516A-MM-SC	New IP Address	192.167.60.151
IP Address	192.167.60.151	Sub Mask	255.255.255.0
MAC Address	00:90:E8:15:7E:BE	Gateway	0.0.0.0
Password		DNS	0.0.0.0
Auto IP	<input checked="" type="radio"/> Disable <input type="radio"/> DHCP <input type="radio"/> Bootp	DNS2	0.0.0.0

- Configuration File

The configuration file can be retrieved from a Moxa Ethernet switch by clicking “Load From Device.” The configuration can be saved on the hard disk for quick replacement in the future. If you would like to restore the configuration file to a newly replaced device, you may click “Load to Device” to do so.

**Device Configuration**

Back Load to device Load from device

	<b>Product Model</b>	EDS-G509	<b>IP Address</b>	192.168.1.60
	<b>Device Name</b>	Unknown	<b>Subnet Mask</b>	255.255.255.0
	<b>Serial No.</b>	00000	<b>Gateway</b>	0.0.0.0
	<b>Firmware Rev.</b>	V1.5	<b>DNS</b>	0.0.0.0
	<b>Auto IP</b>	Disabled	<b>DNS2</b>	0.0.0.0
	<b>Device Location</b>	Switch Location	<b>MAC Address</b>	00:90:E8:18:60:B1

**Available Ports**

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

## Device Monitoring

There are three functions in Device Monitoring

- Traffic

Click “Traffic” and a list of monitored ports will be displayed, then click on the port that you would like to check. For more information, please refer to chapter 8.

- Alarm

Click “Alarm,” to view the “Alarm History” page, which displays all the alarms within 24 hours. For more information, please refer to chapter 7.

- Settings for Monitoring

Click “Setting” and a list of monitored ports and the basic information of a selected device will appear. There is a checkbox by the port, you may check it to activate the monitoring and traffic logging status of that port or uncheck to deactivate.

Following the selected port is a button; use it to change monitoring related parameters. Go to the end of this page to define the specific monitoring thresholds of the alarms or make further configurations.

## Firmware Management

Click on “Firmware Management” to display the firmware version and upgrade history. To upgrade the firmware, check the checkbox of the Moxa Ethernet Switch you want to upgrade and then click “Upgrade.” Another screen will appear to show the location of the firmware. Note that Moxa’s Ethernet switches can be password protected.

Click on “History” to check the firmware upgrade history of the selected device(s).



## Configuration File Management

Click on “Configuration File Management” and a list of monitored devices will appear. Check the checkbox of the Moxa Ethernet switch(es) that requires configuration file import/export.



When you are retrieving configuration file(s) from selected Ethernet switch(es), it is recommended that you store the configuration file(s) with fitting file names that can be easily organized into the directory. Replacing an Ethernet switch in the future will be quick and easy, simply find, and load the configuration file.

If you would like to load a configuration file to a selected device, click on “Load to Device.” You will need to enter the file directory and password to launch the process.

▸ Topology ▸ Alarms ▸ Traffic ▾ Devices > Preferences > About

**Configuration File - Load from device** Back Load from device

Model	Password	IP	MAC Address
EDS-518A-MM-SC	<input type="text"/>	192.167.50.201	00:90:E8:0E:DE:F7

▸ Topology ▸ Alarms ▸ Traffic ▾ Devices > Preferences > About

**Configuration File - Load to device** Back Load to device

Model	Password	IP	MAC Address	Configuration File
EDS-516A-MM-SC	<input type="text"/>	192.167.50.151	00:90:E8:15:7E:BE	<input type="text"/> Browse...

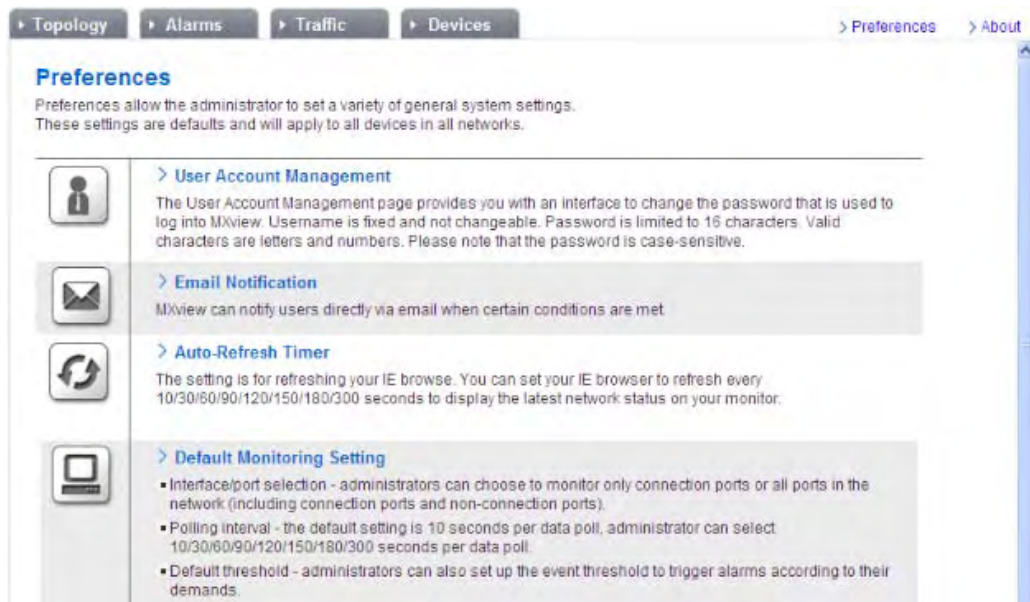
# 10

## Preferences

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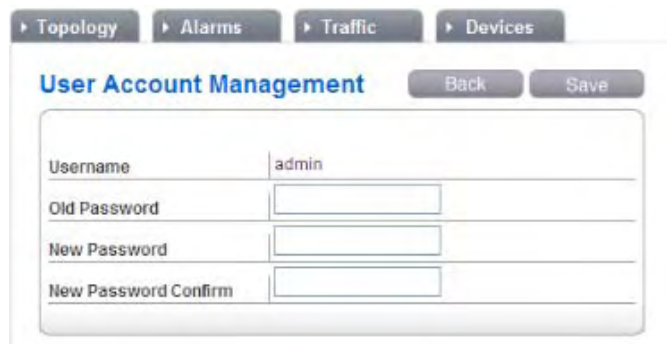
In “Preferences,” there are four useful functions available.

- User Account Management
- Email Notification
- Auto-Refresh Timer
- Default Monitoring Setting



## User Account Management

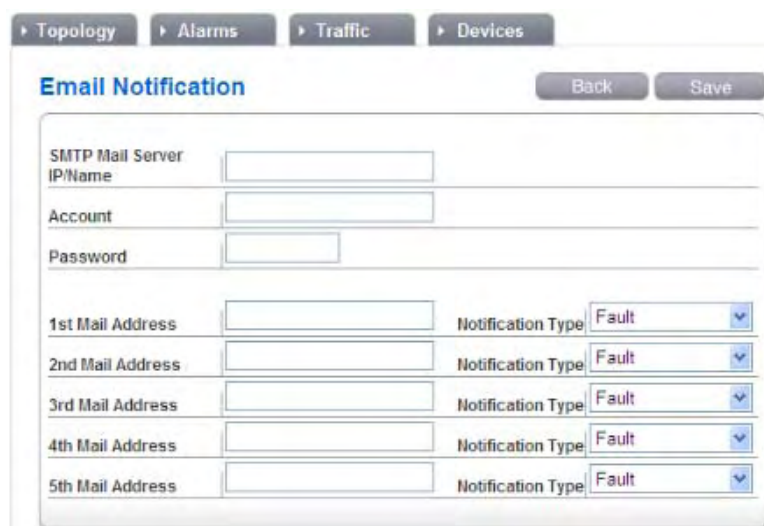
The user name in MXview Lite is “Admin,” and you may set/change the password here.



The screenshot shows the 'User Account Management' form within the MXview Lite interface. At the top, there are navigation tabs: 'Topology', 'Alarms', 'Traffic', and 'Devices'. The 'Alarms' tab is selected. Below the tabs, the title 'User Account Management' is displayed in blue, followed by 'Back' and 'Save' buttons. The form contains four input fields: 'Username' (pre-filled with 'admin'), 'Old Password', 'New Password', and 'New Password Confirm'.

## Email Notification

You may specify up to five parties to be notified by email when an alarm occurs. The “Notification Type,” which indicates the level of severity can be individually set for each party.



The screenshot shows the 'Email Notification' form within the MXview Lite interface. At the top, there are navigation tabs: 'Topology', 'Alarms', 'Traffic', and 'Devices'. The 'Alarms' tab is selected. Below the tabs, the title 'Email Notification' is displayed in blue, followed by 'Back' and 'Save' buttons. The form contains several input fields and dropdown menus: 'SMTP Mail Server IP/Name', 'Account', 'Password', and five rows for '1st Mail Address' through '5th Mail Address'. Each row has a corresponding 'Notification Type' dropdown menu, all of which are currently set to 'Fault'.


## Auto-Refresh Timer

This function automatically refreshes web page content. The default is set to 30 seconds. The response time can be adjusted to as fast as 10 seconds.



## Default Monitoring Settings

Each newly discovered device's port with link up status is set to “monitor” by default. You may manually disable the function.



Ports to Monitor	Link up only		
Polling Interval	10 Seconds		
Topology Icon Size	Small		
Default Alarm Type of Device	<input checked="" type="checkbox"/> Device Inaccessible <input checked="" type="checkbox"/> SNMP Unreachable <input checked="" type="checkbox"/> Link Down		
Default threshold for alarm	<input type="checkbox"/> Bandwidth Utilization	Warning Alarm > 20 %	Fault Alarm > 50 %
	<input type="checkbox"/> Packet Error Rate	Warning Alarm > 20 %	Fault Alarm > 50 %
	<input type="checkbox"/> Collision Rate	Warning Alarm > 5 %	Fault Alarm > 10 %

In the “Topology Icon Size” selection box, you can select the size of the device icons. Note that the small icon option offers better performance, while the large icon option provides a more intuitive presentation.